



Where is the Middle Mississippi River?







The Significance of the Middle Mississippi River



 The MMR is a key corridor in a nationally significant waterway transportation system



 The MMR serves as a major international migratory flyway for waterfowl and non-game birds.



 The MMR is home to some of the nations most highly productive farm ground





The Significance of the Middle Mississippi River



 The Mississippi River is one of the world's most intensively regulated river systems.



 Most of the river and its associated floodplain have been extensively modified for navigation, agriculture, flood control, and other human developments.





Major Issues and Concerns on the Middle Mississippi River



- Loss of side channels and aquatic habitat
- Lack of river connectivity to floodplain
- Increasing demand for recreation opportunities
- Need for continued agricultural viability
- The loss of bottomland hardwoods
- Need for a reliable navigation system
- Desire for well placed and designed ecosystem restoration projects
- Lack of collaborative natural resource planning

Middle Mississippi River Partnership



- Natural Resource managers recognized the need for better planning and coordination on the MMR
- Middle Mississippi River Partnership (MMRP) formed under MOU in December 2004
- Multi-state, multi-jurisdictional collaboration of 16 (now 20) federal/state agencies and not-for-profit organizations.

The Partners



- American Land Conservancy
- Ducks Unlimited, Inc.
- Illinois Forestry Dev. Council
- III. Society of American Foresters
- Missouri Dept. of Conservation
- III. Dept. of Natural Resources
- The Conservation Fund
- The Nature Conservancy
- US Geological Survey
- USDA Forest Service

- SIU Carbondale
- Upper Mississippi & Great Lakes Region Joint Venture
- USDA NRCS (Illinois)
- Wildlife Forever
- USACE, St. Louis District
- US Fish & Wildlife Service
- US EPA
- Missouri Dept. Natural Resources
- Southwestern III. RC&D
- USDA NRCS (Missouri)
- Southwest Illinois Community Foundation

MMRP Coordination Plan



- 1. Completed in 2005
- 1st effort at regional planning
- Good first step
- 4. Began to lay out a vision for the MMR

Coordination Plan 2005

www.swircd.org



Middle Mississippi Regional Corridor Study Proposal

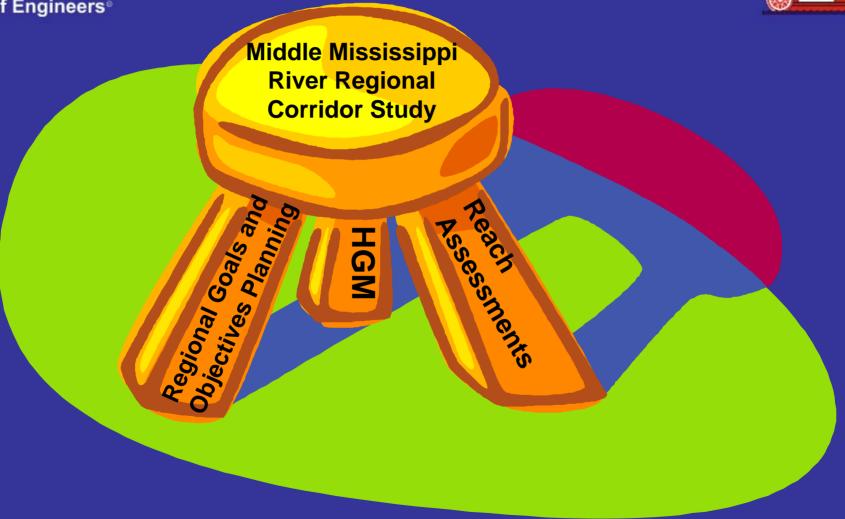


- St. Louis District submitted proposal with encouragement of MMRP
- Build upon the vision in the Coordination Plan



3 Major Focus Areas







Reach Assessments



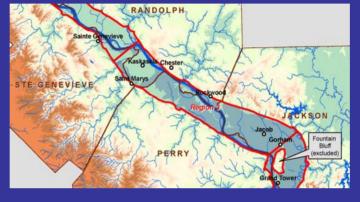
- Natural resource based bottom up approach.
- Broke the basin into 5 "workable" reaches.
- Conducted reach workshops with regional natural resource managers/planners (completed).
- Identifying existing information, needs, and opportunities in each reach.
- Strong GIS data component
- Culminate in written reach assessments.



5 Reaches









Reach Coordinators

NRCS

COE

III. Dept. Natural Resources
USFS

American Land Conservancy







Reach Assessments Results



Meetings were well attended

Reach 1 - 16 agencies/NG0's/groups

Reach 2 - 7 agencies/NG0's/groups

Reach 3 - 10 agencies/NG0's/groups

Reach 4 - 14 agencies/NG0's/groups

Reach 5 - 8 agencies/NG0's/groups





Reach Assessments



Results

- Started at the Reach Level
 - Priorities
 - Needs & Objectives
 - Opportunities
 - Potential Projects
- Broke each reach into smaller sub areas
 - Priorities
 - Needs
 - Opportunities
 - Available Data
 - Ongoing Actions
 - Future Actions
 - Connections with other efforts
 - Potential Projects
 - Area's Priority for Restoration





Reach Assessments Next Steps



- 1. Complete Reach Reports
 - Based on results of the meetings
 - Complete sub-area maps (GIS)
- 2. Incorporate HGM results into reports

Reports complete Spring 2008



Hydro Geomorphic Model



- Strong desire for a landscape level planning tool to help drive future regional natural resource planning.
- HGM GIS based planning tool
 - Soils
 - Geomorphic surfaces
 - Topography
 - Climate
 - Hydrological "System" (Flood frequency)
 - Plant and Animal Communities



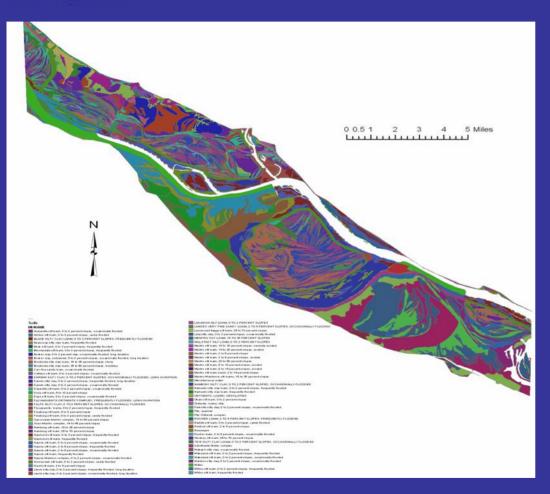
Hydro Geomorphic Model Principles

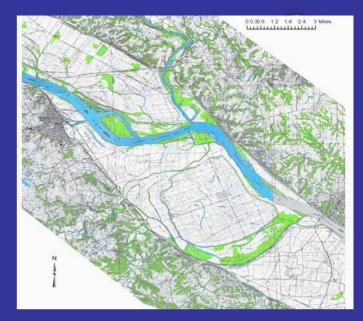


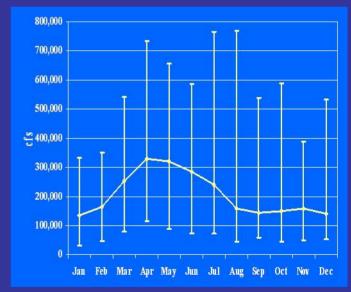
- 1. Establish what it is you are trying to restore, and manage for (pre-settlement conditions).
- 2. Identify the current conditions.
- 3. Determine what the "new" desired state is, or can be (restoration potential).
- 4. Allows agencies to better focus restoration efforts.
- 5. Allow agencies to set restoration targets
 - 1. Need?
 - 2. Desire?
 - 3. Reality?



HGM Elements









The HGM Community Matrix: an example



- Intermediate BLH pin oak dominated with willow oak, sugarberry, American elm
- Riverine Backwater HGM subclass (RB-1)
- 2-5 year flood frequency zone
- Backswamp with local natural levee veneers;
 isolated point bar deposits
- Darwin/Jacob silty clay soils
- Oakwood Bottoms, MAV flats, Bluff Depression in American Bottoms



HGM Status/Schedule



- Partners briefed on status/results to date July
- A lot of excitement over the utility of the tool

Schedule

- Field Data collection July/Aug 2007
- GIS mapping Aug/Sept 2007
- Report Writing Sept/Oct 2007
- Draft Report Oct 2007
- Review Nov/Dec 2008
- Final Report Jan 2008
- Incorporate Results into Reach Assessments Feb/March 2008



Setting Regional Goals, Objectives, & Strategies



- Focused workgroups based on important resources and values.
- Expand upon the earlier work of the MMRP.
- Develop cooperative strategies to accomplish objectives.
- Establish metrics to measure success.
- Actionable items for the partner agencies.

Important Resources and Values



- Forests
- Wetlands
- Wildlife Habitat
- Ag Production
- Aquatic Habitat
- Recreation
- Transportation

- FloodplainManagement
- Water Quality
- Non-Native Invasive Species
- Information & Outreach
- Economic Impact



Setting Regional Goals, Objectives, & Strategies



Next Step

- MMRP developed Goals and Objectives under each Resource Area
- Next steps are:
 - Identify information needed
 - Develop Strategies
 - 3. Develop metrics or targets (ways to measure success)
 - 4. Identify Projects
 - 5. Identify Action Agencies



Setting Regional Goals, Objectives, & Strategies



Proposed Schedule:

<u>Tasks/Milestone</u> <u>Calendar</u>

Workshop members identified August 2007

Begin Regional Goals Meetings September 2007

Complete Regional Goals Meetings February 2008

Draft Regional Goals Report April 2008

Final Regional Goals Report May 2008



Interim Report Format



- Define the region, the need, and the major stakeholders
- Discuss the three major efforts our study is undertaking
- 3. Define the value of our study products
- Discuss importance of our effort with other on-going planning efforts
- 5. Discuss extending efforts beyond the Corps study



Major Study Challenges



- 1. Clarity of Partner/Stakeholder Vision
 - Focusing divergent interests towards a common endpoint
 - By example watershed level objectives and strategies
 - Specific versus general
- 2. Extending the collaborative products beyond the study
 - Strong GIS component
 - Strong desire for a central website for collaborative products and data
 - Who maintains it?



Major Study Successes



- 1. Strong Stakeholder Support
 - Numerous requests for outside agency briefings
 - Meetings, briefings well attended
 - Strong interest and desire to participate
- 2. Better Communication between Stakeholders
 - Better understanding of other agencies visions
 - Better understanding of other agencies capability
 - Development of a strong natural resource network for the MMR
- Corps has been able to help focus efforts, drive action in the MMR



Questions?





Brian.L.Johnson@mvs02.usace.army.mil

314-331-8146